ADVANCED REACTOR, FUEL CYCLE, AND ENERGY PRODUCTS WORKSHOP FOR UNIVERSITIES

Dan Ingersoll

AFCR&D

GNEP Grid-Appropriate Reactors For International Deployment

Oak Ridge National Laboratory

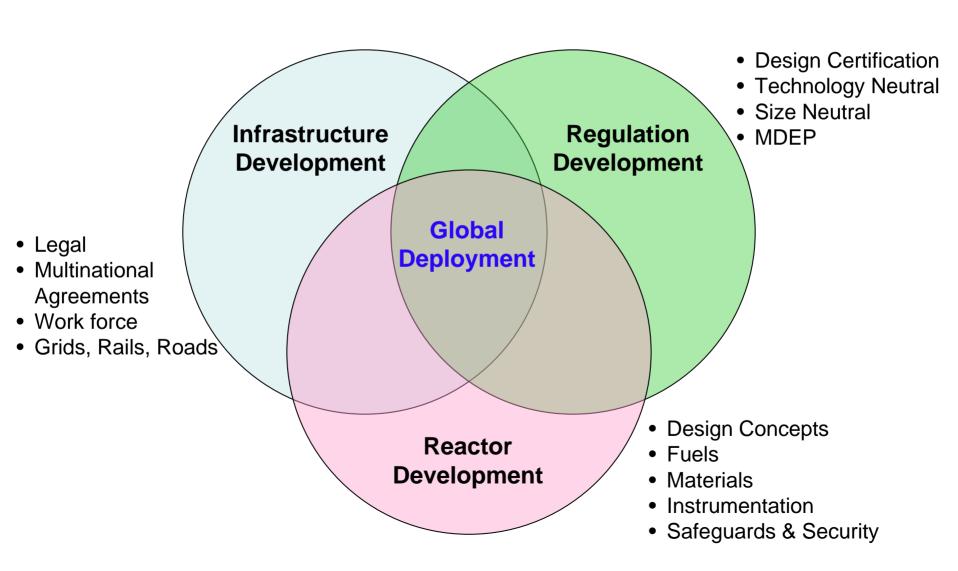
Workshop for Universities Hilton Hotel, Gaithersburg, MD March 20, 2007



Area Overall Work Scope

The development, demonstration, and deployment of appropriately-sized reactor designs that can provide the developing parts of the world with safe, simple and robust sources of energy to meet their expanding needs for electricity, potable water, and district heating at an affordable price, while also *minimizing the* risks of nuclear proliferation and negative impacts on the environment.

Program Will Address Diverse Set Of Development Needs



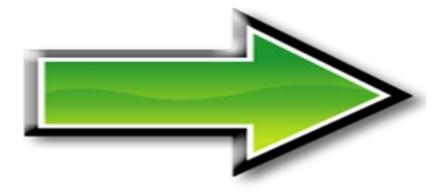
Proposed Two-Track Approach

Near-Term Design(s)



Address Existing Global Demand

Next Generation Designs



Address Full Set Of Requirements

WORK IN PROGRESS FOR FY07

- Prepare Program Plan for Grid-Appropriate Reactor element of GNEP
- Develop user criteria and technical requirements to guide longer-term technology development efforts
- Engage international community
 - Russia-US subgroup on export reactors (March 13-14)
 - Japan-US working group on small and medium-sized reactors (April 17-18)
 - INPRO "Common User Criteria" (in progress)
 - IAEA workshops on "Issues Related to the Introduction of Nuclear Energy"
 - INPRO project to develop roadmap for deployment of nuclear energy in developing countries
- Bottom line: Get organized, get ready, get going

PLANS FOR FY08-09

- Support Design Certification preparations for near-term design
- Initiate and develop international consensus on "GNEP Certification" process and criteria
- Develop and evaluate concepts for nextgeneration designs
- Initiate cross-cutting technology development for next-generation designs

Program Will Require A True Global Partnership

- International involvement will be vital in all aspects of program
 - User needs and system requirements
 - Licensing and certification
 - Advanced concept development
 - Technology research and development
- Will include participation of industry, laboratories, and academia
- Leverage existing relationships, agreements and programs to fullest extent
 - GIF, INPRO, NERI, I-NERI, NEA, IAEA, etc.